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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,359	06/23/2006	Masaki Inoue	4265-0071WOUS	3372
35301 7590 02/02/2009 MCCORMICK, PAULDING & HUBER LLP CITY PLACE II 185 ASYLUM STREET HARTFORD, CT 06103				
EXAMINER JOHNSON, MATTHEW A				
ART UNIT		PAPER NUMBER		
3656				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/584,359

**Applicant(s)**

INOUE ET AL.

**Examiner**

MATTHEW A. JOHNSON

**Art Unit**

3656

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, are rejected under 35 U.S.C. 102(b) as being anticipated by Katsumi et al. (JP 09-190225).

Re clm 1: Katsumi discloses a linear actuator comprising:

- A shaft (13) having a male thread portion
- A worm gear speed reducer (7, Fig. 5) for reducing rotation of a motor (6) in speed and transmitting the rotation to the shaft (see paragraph [0019] of translation)
- A female thread member (14) which is threadedly engaged with the male thread portion (Fig. 9) and which moves forward and backward with respect to a housing (10, 43)
- A position detection apparatus (51) which is disposed in parallel to the shaft (Fig. 7) and means (44, 45, 51b, 52) for adjustably mounting the position detection apparatus to the housing, whereby the position detection apparatus is movable in a direction of the moving cylinder and allows detection of a position of the moving cylinder in the housing to be adjusted (see paragraphs [0031]-[0034], [0048]-[0049] & [0052]-[0053])

Re clm 2: Katsumi further discloses the position detection apparatus comprises a potentiometer (51, 54) which converts the rotation amount of the shaft into a voltage value (Fig. 18), and the position detection apparatus is movably provided on the housing (see English Abstract, Figs. 16 and 17).

Re clm 3: Katsumi further discloses a driven gear (46) is mounted on a sensor shaft (44) of the potentiometer, the driven gear is meshed with a pinion (49) which rotates in unison with the shaft (via 42), and the potentiometer can move in an axial direction of the moving cylinder (English Abstract).

Re clm 4: Katsumi further discloses the position detection apparatus comprises a potentiometer (51, 54) which converts the rotation amount of the shaft into a voltage value (Fig. 18), and the potentiometer can slide in an axial direction of the moving cylinder.

Re clm 5: Katsumi discloses a linear actuator comprising:

- A shaft (13) having a male thread portion (12)
- A worm gear speed reducer (7, Fig. 5) for reducing rotation of a motor (6) in speed and transmitting the rotation to the shaft (see English Abstract)
- A female thread member (14) which is threadedly engaged with the male thread portion (Fig. 9) and which moves forward and backward by normal or reverse rotation of the shaft
- A moving cylinder (15) which is fixed to the female thread member and which moves forward and backward with respect to a housing (10)

- A position detection apparatus (54, 51) which is disposed in parallel to the shaft (Fig. 7) and detects a position of the moving cylinder (see English Abstract)
- Wherein the position detection apparatus includes a guide pin (55) slidably mated with a guide groove (between 43b, see Figs. 9, 10, 16 and 17) formed in the housing, and the position of the moving cylinder in the housing detected by the position detection apparatus can be adjusted in a direction of the moving cylinder (see paragraphs [0031]-[0034], [0048]-[0049] & [0052]-[0053])

### ***Response to Arguments***

3. Applicant's arguments filed 11/5/2008 have been fully considered but they are not persuasive.

Applicant argues that Katsumi does not disclose a position detection apparatus that is adjustably mounted to a housing. Katsumi discloses that bracket (43) is integrally attached to the housing 10 (see paragraph [0029]) and houses the position sensor (51). Katsumi further discloses that the sensor (51) is configured to allow adjustment so that the position sensor and the actual position of the moving cylinder are accurately matched after a power failure or maintenance on the device (see paragraphs [0031]-[0034], [0048]-[0049] & [0052]-[0053], specifically [0049] & [0052]).

Applicant further argues that Katsumi does not disclose the position sensor including a guide pin and a guide groove formed in the housing. As described above,

Katsumi discloses a guide pin (55) slidably disposed in a guide groove (between 43b, Fig. 10) of the housing (43). See also Figs. 9, 10, 16 and 17.

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **MATTHEW A. JOHNSON** whose telephone number is (571)272-7944. The examiner can normally be reached on Monday - Friday 9:00a.m. - 5:30p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MATTHEW A JOHNSON/  
Examiner, Art Unit 3656

/Richard WL Ridley/  
Supervisory Patent Examiner, Art Unit 3656